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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,489	11/28/2003	Noriyuki Unno	245672US90	9675
22850	7590	05/04/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER	
			MANCUSO, HUEDUNG XUAN CAO	
			ART UNIT	PAPER NUMBER
			2821	
			NOTIFICATION DATE	DELIVERY MODE
			05/04/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

10/722,489

Applicant(s)

UNNO ET AL.

Examiner

Huedung Cao Mancuso

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 and 37-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 37-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's remarks and amendments have been fully considered and are convincing to overcome the previous rejection. However, additional art has been found and a new grounds of rejection are presented below. The examiner regrets the late citation of these references.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, and 37, 39, 41, 43, 45, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Kamakura et al. (US 5,953,158) and Ohara et al. (US 6,965,352).

As to claim 1, Kamakura discloses: an outer mirror apparatus (Figs 3-10) comprising: a mirror base (7) configured to be attached on a side of an automobile and extend outward from said side of said automobile a mirror housing (15, 17) suspended underneath said mirror base and housing a mirror. However, the reference does not specify that an antenna is located within the mirror base, though the inclusion of an antenna as part of an external car mirror is well known. Ohara discloses an external car mirror (Figures 5-6) where an antenna unit (variously referenced as 15 and 35) is installed in said mirror base (16). See column 6, line 12 to column 7, line 67 and

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column 2, lines 50-60. To one of ordinary skill in the art it would have been obvious to put an antenna in the base of the mirror of Kamakura because of the conventionality of using antenna as part of external car mirrors (col 1, lines 15-21) and because putting the antenna in the base of the mirror will allow it to be isolated from other components (e.g., metal) that could interfere with the signal and because putting it in the base, when the mirror is movable, will help to ensure that the mirror is properly positioned (see Ohara, col. 2, lines 41-60 and col. 6, lines 30-64.

As to claims 3, 37, further comprising: a first connector connected to said antenna unit and configured to be connected to a second connector connected to an on-vehicle device in said automobile, said first connector placed in said mirror base, Ohara discloses the antenna receiving a signal and being connected to unlock the car (col 7, lines 7-12) where these elements need to be connected to one another to properly function.

As to claims 5, 7, 39, wherein, said antenna unit has a capability of receiving a plural radio wave bands, while Ohara does not specifically recite the wave bands the antenna is constructed to receive, it is very conventional to have antenna to be constructed to receive many different wave bands (Official notice). To have an antenna being able to receive a plurality of wave bands would increase the functionality of the device and make it more useful.

As to claims 9, 11, 13, 15, 41 wherein, said mirror base comprises a base body to which said antenna unit is installed and an outer cover which covers a top of said mirror base and is made of a radio wave transmittable material, see the discussion of claim 1, above. Further, since the antenna is within the housing the housing would inherently need to be transmissive to the frequencies the antenna is intended to receive/transmit. If it were not transmissive to these frequencies, the antenna would not be able to work.

As to claims 17, 19, 43, wherein, said mirror base comprises a base body to which said antenna unit is installed and an outer cover which covers a top of said mirror base, the outer cover made of an infrared light transmittable material or made of a material of which surface is finished by a material that allows infrared light to transmit through said outer cover, while Ohara does not specify that the antenna receives/transmits infrared light, as indicated above, the cover needs to be of a material that allows the frequencies the antenna receives/transmits to pass through it. Thus, if the antenna receives/transmits infrared light the housing would necessarily have to pass infrared light. Further, the system of Ohara is for, in part, unlocking a car using a remote device and it is conventional to use infrared light with remote car openers.

As to claims 21, 23, 45 wherein, an inner surface of said mirror base is frost-painted, while the references do not specify this detail, it is very well known to frost-paint surfaces of a mirror housing to produce a better mirror device (official notice).

As to claims 25, 47, an automobile having a pair of outer mirror apparatus mirrors as defined in one of claim 1 to claim 24 on both left and right hand sides of said automobile, see Fig 1 of Kamakura and Figs 5-6 of Ohara.

***Allowable Subject Matter***

4. Claims 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 38, 40, 42, 44, 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 2 recited the "mirror base has a fixing device ... and adjust a fixing angle of the antenna unit therein". The closest prior art (Ohara) discloses that the antenna is fixed within the

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base and teaches away from adjusting the position of the antenna (see column 6, lines 34-37, for example).

*Inquiries*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Mancuso whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens, can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Mancuso  
Patent Examiner

